Dominion® KX

Quick Installation and Setup Guide

I. Prepare Devices and Network for Remote Operation

Congratulations on your purchase of Dominion KX, the industry's most fully-featured digital KVM (keyboard/video/mouse) switch. Before connecting the Dominion KX, configure each device that you intend to access via Dominion KX with the parameters below. This very important installation procedure ensures optimal performance and responsiveness when using the remote server access capabilities of Dominion KX.

For more detailed documentation, please see the CD ROM enclosed with your shipment or go to the User Documentation Support page on Raritan's Website. For assistance in North or South America, please contact the Raritan Technical Support Team by telephone (732) 764-8886, by fax (732) 764-8887, or by e-mail tech@raritan.com - ask for Technical Support - Monday through Friday, 8:00 a.m. to 8:00 p.m., Eastern .

All Servers

A. For optimal bandwidth efficiency and video performance, set the OS desktop background to a predominantly solid, plain, light-colored graphic.

B. Ensure that the server's video resolution and refresh rate are supported by Dominion KX, and the signal is non-interlaced.

Text Modes:

640x480 @ 60Hz	1024x768 @ 60Hz
640x480 @ 72Hz	1024x768 @ 70Hz
640x480 @ 75Hz	1024x768 @ 75Hz
640x480 @ 85Hz	1024x768 @ 85Hz
720x400 @ 70Hz	1152x864 @ 60Hz
720x400 @ 85Hz	1152x864 @ 70Hz
800x600 @ 56Hz	1152x864 @ 75Hz
800x600 @ 60Hz	1280x960 @ 60Hz
800x600 @ 72Hz	1280x1024 @ 60Hz
800x600 @ 75Hz	
800x600 @ 85Hz	

Windows XP / Windows 2003

Disable **Enhanced pointer precision** and set the mouse motion speed exactly to the middle speed setting. These options are located in **Control Panel > Mouse > Pointer Options.**

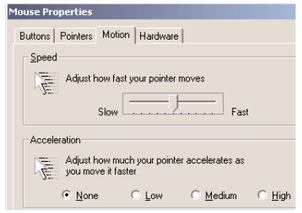
Disable transition effects in **Control Panel > Display > Appearance > Effects.**

Windows 2000 / ME

Set mouse pointer acceleration to "None" and the mouse motion speed exactly to the middle speed setting. Disable transition effects in **Control Panel > Display > Effects.**

Windows 95 / 98 / NT

Set mouse motion speed to the slowest setting in **Control Panel > Mouse > Motion.**



Disable window, menu, and list animation in **Control Panel > Display > Effects.**

Linux (with Graphical Desktop)

Set mouse acceleration to exactly 1 and threshold to exactly 1.

Sun Solaris (with Graphical Desktop)

Set mouse acceleration to exactly 1. Ensure that your video card is set to a supported resolution and that its output is VGA (H-and-V Sync, not composite sync). This non-default configuration can be set in the bootprom mode by issuing the command:

setenv output-device screen:r1024x768x70

When finished, issue the "boot" command to reboot.

Macintosh

No specific mouse settings are required, but you must set the Raritan Remote Client to **Single Cursor Mode** when using Dominion KX to access and control a Macintosh system remotely. Please note that the default Mouse Mode is **Standard.**

Please see the Dominion KX User Guide on the enclosed CD-ROM for additional details on switching Mouse Cursor Mode or activating Intelligent Mouse Mode.

Network / Firewall

To enable remote access to Dominion KX, your network and firewall must allow communication on TCP Port 5000. You can also configure Dominion KX to use a different TCP port of your own designation; please see the Dominion KX User Guide for additional informtion.

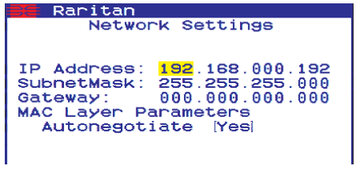
Optional: To access Dominion KX via Web browser, your firewall must also allow access to TCP Port 443 (Standard HTTPS). For additional convenience, you may also want to allow access to TCP Port 80 (Standard HTTP); Dominion KX will forward all HTTP requests to HTTPS, allowing end users to securely use either "http" or "https" as a URL.

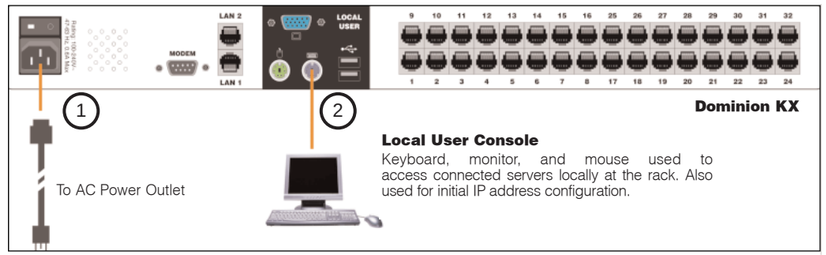
***Note:** Raritan recommends changing the default Admin password ("**raritan**") as soon as possible after installation. Please see **VIII. Change Password** for instructions.*

II. Attach Local User Console, Set IP Address, and Connect to Network

In this step, you will connect the console used for accessing servers directly at the rack, use this console to set Dominion KX's IP address, and connect to your Network. To return to the On-Screen Display (OSD) at any time, press the **Scroll Lock** key twice rapidly.

1. Attach the included AC power cord to the Dominion KX unit, and plug into an AC power outlet. If installing a KX464 with dual power failover protection, attach the second included AC power cord and plug it into a different power source than the first power cord.
2. Attach a keyboard and mouse (either PS/2 or USB); and a multisync monitor to the corresponding ports in the back of Dominion KX marked "Local User."
3. Power ON the Dominion KX.
4. After the KX unit boots, the On Screen Display (OSD) appears. Use the OSD to access servers while using the unit at the rack. Log in with the default username/password of **admin/raritan** (or your new username/password if you have already changed defaults) and press **ENTER**.
5. Press the **F5** key to activate the Administrative Menu.
6. Use the ↑ and ↓ keys to select option 3 **Network Settings** and press **ENTER.**
7. Specify TCP/IP parameters for your Dominion KX unit: IP address; subnet mask; and default gateway.





When finished, press the letter **S** on your keyboard. The unit will reboot automatically.

***Note:** If you experience network disconnect issues, change your MAC layer parameter to 100/full duplex or the appropriate value for your network.*

8. Connect one end of a straight-through Ethernet cable (included) to the port labeled "LAN1" on Dominion KX, and the other end to a network switch or router. **[Optional]** For Ethernet redundancy, use a straight-through Ethernet cable to connect the "LAN2" port to another network switch or router. Should the Ethernet connectivity on LAN1 become unavailable, Dominion KX will failover to this port with the same TCP/IP settings — at all other times, this port will be disabled.

***Note:** You must enable automatic failover in KX Manager, or this option will not function - please see the Dominion KX User Guide for additional information.*

9. From any networked workstation, confirm access by typing the following URL in your Internet browser's address line:

http://IP-ADDRESS/admin

where IP-ADDRESS is the IP address that you designated in Step 7.

ALTERNATIVE: You can also connect to Dominion KX directly via Ethernet from your workstation, skipping steps 4 - 8 above.

To do so, attach one end of a crossover Ethernet cable (included) directly to your workstation's Ethernet card, and the other end to Dominion KX's "LAN1" port.

Enable your workstation to access the default IP address of Dominion KX: 192.168.0.192. One method is to temporarily set your workstation's IP parameters to:

IP Address: **192.168.0.1**

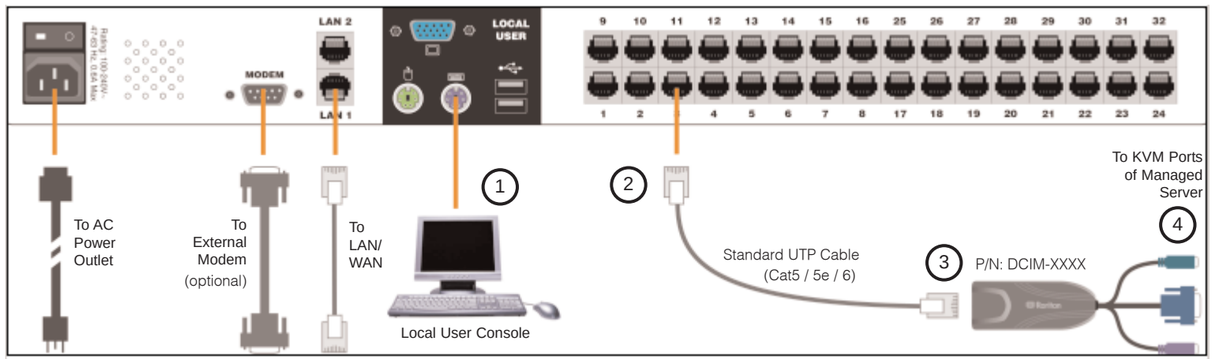
Subnet mask: **255.255.255.0**

Default gateway: **192.168.0.1**

When finished, follow Step 9, above, being sure to use Dominion KX's default IP address: **192.168.0.192**.

III. Attach Servers

In this step, connect Dominion KX to the servers that you want it to manage.



1. If not already attached, attach keyboard, mouse, and multisync monitor to the corresponding ports in the back of Dominion KX marked "Local User." This Local User Console is used to access servers directly from the rack.
2. Connect one end of a standard, straight-through UTP cable (Cat5 / 5e / 6) to an unoccupied server port on the rear panel of the Dominion KX.
3. Connect the other end of the UTP cable to the RJ45 port on a Dominion KX Computer Interface Module: DCIM-PS2 (PS/2 ports); DCIM-USB (USB ports); DCIM-SUSB (USB ports for Sun servers); or DCIM-SUN (Sun ports with HD15 video). Paragon CIMs supported by DKX version 1.4 and higher include: P2CIM-PS2, P2CIM-SUN, P2CIM-USB, P2CIM-SUSB, UKVMPD, USKVMPD, UKVMC, USKVMC, P2CIM-PS2-DUAL, UUSBPD, and P2CIM-PWR.
4. Connect the remaining ports on the CIM to the corresponding KVM ports of a server that you want to manage using Dominion KX.
5. Repeat steps 2 through 4 to connect any other servers that you want to manage using Dominion KX.

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Dominion® KX

Quick Installation and Setup Guide

IV. Assign Names to Server Ports

Using the Local User Console

1. If not already attached, connect a keyboard, mouse, and monitor to Dominion KX. On the local user console OSD, log on with the default username/password of **admin/raritan** (or your new username/password if you have already changed these default values).
2. Press the **F5** key on your keyboard to activate the Administrative Menu
3. Press ↑, ↓, or type **5** to select Option **5 Channel Configuration** and press **ENTER.**
4. Press ↑ or ↓ to select a server port to rename, and press **ENTER.** When the highligh turns green, type a new name (up to 20 characters) to identify the server connected to that port. Press **ENTER** when finished to save the new name.
5. Press **ESC** to exit the menu.

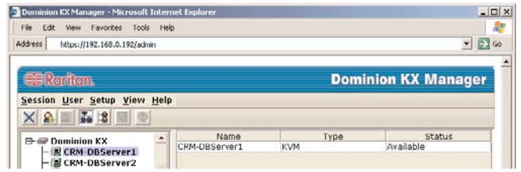
Using a Web Browser

1. On any workstation with network connectivity to your Dominion KX, and with Java Runtime Environment (JRE) 1.4.x or later installed, launch KX Manager in a Web browser by typing:

http://IP-ADDRESS/admin

where IP-ADDRESS is the IP address that you designated in Section II-7.

2. The Dominion KX Manager applet will load and launch. Log on with the default username/password of **admin/raritan** (or your new username/password if you have already changed these default values).



3. In the left panel of the screen, find the server port that you want to change. Click on the server icon, right-click on it, and click **Properties** on the shortcut menu. Type a new name (up to 20 characters) to identify that server. Press **ENTER** when finished.

Please see the **Dominion KX User Guide, Chapter 3: Administrative Functions** for additional information and instructions on using KX Manager.

V. Connect Remotely Using MPC or RRC

Raritan Multi-Platform Client (MPC) and Raritan Remote Client (RRC), Raritan's graphical interfaces, allow you to remotely access the target devices connected to Raritan's Dominion and IP-Reach units. Please note that RRC works only with MS Internet Explorer (IE), and MPC loads automatically in any other Web browser.

Install and Launch RRC (on a Windows Computer using IE)

1. Log on to any Windows-based computer with network access to your Dominion KX.
2. If you are using Windows NT, 2000, XP, or 2003, ensure that you are not a "restricted" user.
3. Launch Microsoft IE.

Note: An IE default security setting of Medium is sufficient. Also, please ensure that your IE security settings allow the download and execution of ActiveX controls.

4. In the URL text field of your Web browser, type the IP address you assigned in step II-7 and press **ENTER.**
5. After RRC launches, a device tree of all automatically-detected Raritan devices found on your subnet is displayed on the left side of the screen. If you do not find your Dominion unit listed by name, create an icon manually by selecting **New Profile** on the **Connection** menu. Type a Description, specify Connection Type, type the Dominion's IP Address and click **OK.** These values can be edited later.

6 In the Navigator panel on the left side of the screen, double-click on the icon that corresponds to your Dominion unit.

Install and Launch MPC (on All Other Platforms)

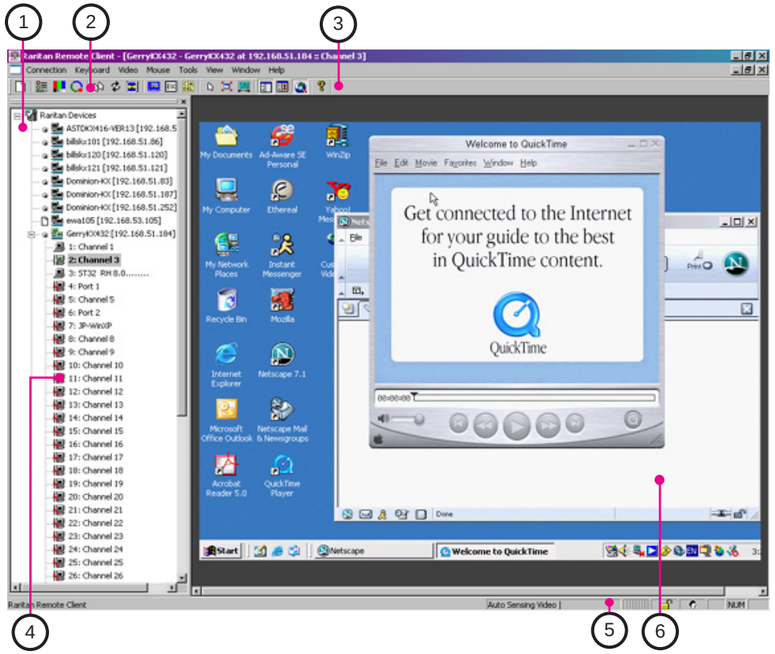
To launch MPC from any browser except IE running on a Windows PC, type **http://IP-ADDRESS** into your browser's address line, where IP-ADDRESS is the IP address you assigned in step II-7 and press **ENTER.**
To launch MPC from a Windows PC running IE, type **http://IP-ADDRESS/mpc** into the IE URL text field, where IP-ADDRESS is the IP Address you assigned in step II-7, and press **ENTER.**
Please note that the MPC applet will launch in a new window that does not contain the IE Menu bar, Tool bar, Scroll bar, or Address bar. You can work in this window and toggle to other open windows using the key command **ALT+TAB.**

You can also install MPC as a standalone applet, described further in the **Raritan Multi-Platform Client and Raritan Remote Client User Guide.**

***Note:** Regardless of browser, you must allow pop-ups from the Dominion's IP address in order to launch MPC.*

VI. Remotely Access and Control Connected Servers

After logging on to the Dominion KX unit, use the MPC or RRC Navigator on the left side of the MPC or RRC screens to select and connect to a port. Please note that the RRC screen shown below differs slightly from the MPC screen, which has a Message panel below the Navigator panel; the Message panel displays a simplified events log. For more detailed instruction on MPC or RRC use, please see the **Raritan Multi-Platform Client and Raritan Remote Client User Guide.**



1. The Navigator displays any known Dominion units in a single view. Click **Connection > New Profile** to create new entries.
2. Click on **Synchronize Mouse** to converge the mouse pointers displayed in KVM windows. If your mouse pointers fail to converge, be sure to review **Section I: Prepare Devices and Network for Remote Operation** to correctly configure your managed server.
3. The Toolbar provides easy access to the most frequently-used tools and features.
4. Double-click on a server port to establish access to, and BIOS-level control of, the server's KVM ports.

- Double-clicking another server port on the same Dominion unit will switch your session to that server. If your Dominion hardware supports multiple simultaneous remote server connections, you can right-click on a port and click **New Connection** to open additional sessions.

5. The Status Bar provides real-time information on connection parameters.
6. When connected to a KVM console port, keystrokes and video signals are transmitted in real-time, exactly as if you were connected directly to the server.

VII. Maximize Remote KVM Performance

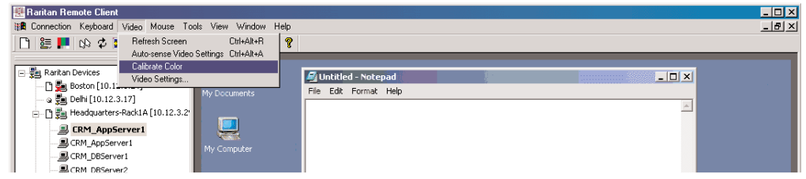
Dominion KX's dynamic video compression algorithms maintain usability of KVM consoles under varying bandwidth environments. Your Dominion unit can optimize its output not just for the corporate LAN, but also for lower-bandwidth WAN and dial-up connections. By adjusting color depth and limiting video output, Dominion KX offers the optimal balance between video quality and system responsiveness in any bandwidth constraint. Familiarize yourself with the following parameters to adjust performance options even further.

Noise Filter

Video cables can generate electrical noise on a monitor that cannot be seen by the naked eye. Your Dominion unit reduces the bandwidth it consumes by intelligently ignoring extraneous signal noise. Setting the noise filter too high can prohibit Dominion from correctly transmitting screen changes; setting it too low can use too much bandwidth.
On the menu bar, select **Video > Video Settings** to adjust the Noise. The default value of **2** works for most environments; set to **1** or **0** for more responsive video or to **5** or **7** for low bandwidth connections (including modem).

Color Calibration

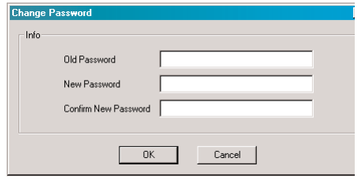
Some video cards output non-standard signal levels. Perform a color calibration upon inital setup to optimize transmitted color for accuracy using the Video menu. On the RRC menu bar, click **Video > Calibrate Color.**



VIII. Change Password

For security reasons, Raritan recommends that you reset the default Admin password as soon as possible after installation.

1. Double-click on the Dominon KX icon in the MPC or RRC Navigator and log on to the unit.
2. On the **Tools** menu, click **Update,** and then click **User Password.**
3. Type your current password in the **Old Password** field.
4. Type your new password in the **New Password** field and retype it in the **Confirm New Password** field.
5. Click **OK.**



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